APPENDIX D4

Brochure entitled "RT1000 Radio Data Termninal" (Two Sides) Copyright 1991 by Norand Corporation



RT1000 Radio Data Terminal

Introducing the NORAND® RT1000 Radio Data Terminal, Your Lightweight On-Line Productivity Tool that Fits in the Palm of Your Hand

Norand Corporation announces the newest addition to its family of products... the RT1000 Radio Data Terminal. This hand-held radio terminal is packed with the features you've been asking for and offers the advantages of online, real-time communications at a price guaranteed to maximize your company's return on investment.

This radio frequency (RF) terminal is so compact and lightweight it can fit into your shirt pocket. No other terminal comes close to matching the value offered by the RT1000 Radio Data Terminal.

The RT1000 Terminal features a 47-key alphanumeric keyboard with 4 soft-programmable keys, defined by the application software and downloaded when the terminal is initialized. A shift mode on the keyboard allows selection for up to 8 programmable characters along with upper case and lower case support. This keyboard layout makes it ideal for domestic and international applications requiring unique character sets.

The terminal incorporates a 4-line by 16-character liquid crystal display. The large characters on the Reflective Super Twist display enhance readability, even in low light environments.

The innovative architecture of the RT1000 Radio Data Terminal includes a central processor unit and analog board incorporating surface-mount, memory-on-chip technology. In addition, a patented self-contained, removable radio module gives the user the flexibility to change



operating frequency on the spot. This unique modular design makes the RT1000 one of the most versatile, reliable, and serviceable products on the market.

The RT1000 is the ideal choice for new and current NORAND® RF users who are looking for a compact, lightweight, attractively priced solution to their data collection process. The backward and forward compatibility of the RT1000 Radio Data Terminal makes future upgrades quick and easy to implement. This insures the value of your investment now and for years to come.

FEATURES:

- Simple to install and use
- Interchangeable radio module
- Compatible with all current production Norand® products
- Compact functionality for maximized value

RT1000 Radio Data Terminal SPECIFICATIONS

Product Features:

Transceiver: Incorporates a 1 watt (UHF) frequency modulated (FM) radio transceiver controlled by the microprocessor. Type accepted per FCC Rules & Regulations, Parts 2 & 90, Private Land Mobile Radio Service

Liquid Crystal Display (LCD): 4-line × 16-character Reflective Super Twist LCD

Keyboard: Elastomer 47-key alphanumeric with 4 soft-programmable character keys (8 special characters possible with shift key engaged)

Annunciators: Battery recharge indicator on the terminal's LCD

Radio Module: Patented self-contained, interchangeable 1-channel radio module with built-in receiver self-test

Radio Antenna: Stud-mount, screw-in antenna connects directly to the end of the radio module

Drop Survival: Designed to withstand 4-foot drop to concrete

Hand Strap: Incorporates a user replaceable, elastic hand strap to secure the terminal firmly in hand

Belt Attachment Point: Removable clip allows terminal to be fastened to the belt

Device Features:

Central Processor Unit: 16-bit microcontroller

Shielding: Conforms to FCC Part 15 for Class A computing devices

Audible Tone: Audible annunciator to alert operator of action

Scanner Interface: 9-pin
D-subminiature connector for interface to 5 volt scanning peripherals with built-in scanning self-test

Electrostatic Discharge: Designed to withstand up to 20kV for Class C products

RAM: 512 bytes x 8 bits

ROM: 16K bytes x 8 bits (masked)

Physical Dimensions:

Size: 6.875" x 2.625" x 1.25" (LWD) (17.46cm x 6.68cm x 3.18cm)

Antenna Length: 2" (5.08cm)

Weight: 14.25 ounces (404g)

Environmental Characteristics:

Temperature:

Operating: 32° to 122°F (-0° to 50°C)

Storage: -22° to 158°F (-30° to 70°C)

Recharging: 41° to 104°F (5° to 40°C)

Humidity: 10 to 90% noncondensing

Altitude: To 10,000 feet (3,048 meters) above sea level

Internal Power Source:

Battery Cells: Standard rechargeable nickel-cadmium battery pack

Voltage: 7.2 VDC (nominal)

Operating Time Between Charges: 8 hours typical, based on customer usage of 8 scans/transmissions per minute

RT1000 Battery Pack Characteristics:

Normal Recharge: Complete in less than 8 hours

Pack Life: At least 500 discharge/charge cycles

Low Battery Indicator: Visual annunciator indicating low battery is displayed on the LCD

Battery Pack Charging:

Charging Sources: AC adapter-type single terminal chargers and multi-battery pack chargers available

Radio Characteristics:

Radiated Power: 1 watt (maximum)

Frequency Range: 450 to 470 MHz

RF Data Rate: 4800 baud

Bar Code Scanning Support:

CCD (5V) Visible Laser Diode (5V) Pen Wand (5V)

Bar Code Symbologies Supported: UPC, UPC with add-ons, EAN, EAN with add-ons, Code 39, Interleaved 2 of 5, Code 128, Plessey

NORAND DATA SYSTEMS

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